



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

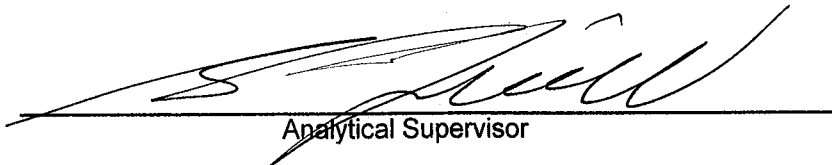
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002366
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using good laboratory practices and in accordance with federal or state approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002366001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 05/12/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 8.17 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 16.85
Dissolved Oxygen: 9.88 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	14	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	18	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	16	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	16	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366003
Project Name: TVA-Ash Spill
Sample Description: Field Blank-Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FB
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1-Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FD
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	16	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	17	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/12/2009 11:03
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 50 uMHO
Temperature: 17.15
Dissolved Oxygen: 9.52 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	16	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	18	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 05/12/2009 11:15
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.28 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.11
Dissolved Oxygen: 9.39 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	16	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	37	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366007
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 05/12/2009 11:23
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.13 pH Units
Chlorine, residual:
Conductivity: 51 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.23 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	44	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	39	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	21	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/12/2009 11:34
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.70 pH Units
Chlorine, residual:
Conductivity: 200 uMHO
Temperature: 17.20
Dissolved Oxygen: 9.76 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	100	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	82	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	20	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002366009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/12/2009 11:42
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.43 pH Units
Chlorine, residual:
Conductivity: 62 uMHO
Temperature: 19.18
Dissolved Oxygen: 9.04 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	20	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	20	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	21	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number:	K00002366010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.86 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	244 uMHO
Project Site No.:	6	Temperature:	15.78
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.19 mg/L
Date/Time Collected:	05/12/2009 11:53	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	05/12/2009 14:37		
Received By:	E McCrary		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	5/19/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	90	mg/L	0.7	1	P Leathers	5/19/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	P Leathers	5/13/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	36	mg/L	10	10	A Peebles	5/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

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TDH: Lab Services NCL
Lab Services - Nashville Central Lab
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Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002366
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.



Analytical Supervisor

Lab-Sample Number: K00002366001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 05/12/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 8.17 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 16.85
Dissolved Oxygen: 9.88 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	190	µg/L	2.9	10	A Wilson	5/12/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	97	µg/L	6.4	10	A Wilson	5/22/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/22/2009
Barium	23	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.23J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	1.8	µg/L	0.38	1	A Wilson	5/22/2009
Lead	0.20J	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	28	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	0.91J	µg/L	0.25	1	A Wilson	5/22/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.14J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	4.0J	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	3.0J	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 05/12/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 8.17 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 16.85
Dissolved Oxygen: 9.88 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	0.05J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MLQ

MDL - Method Detection Limit

MLQ - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002366002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	310	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	200	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	0.64J	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	1.8J	µg/L	0.93	5	A Wilson	5/22/2009
Barium	29	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.37J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	0.63J	µg/L	0.38	1	A Wilson	5/22/2009
Lead	0.38J	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	64	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	1.2	µg/L	0.25	1	A Wilson	5/22/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	0.046J	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.17J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	7.0	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	2.4J	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations

pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002366003
Project Name: TVA-Ash Spill
Sample Description: Field Blank-Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FB
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	A Wilson	5/12/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	A Wilson	5/12/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/12/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/12/2009
Barium	U	µg/L	2.5	5	A Wilson	5/12/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/12/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/12/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/12/2009
Cobalt	U	µg/L	0.04	1	A Wilson	5/12/2009
Copper	U	µg/L	0.38	1	A Wilson	5/12/2009
Lead	U	µg/L	0.10	1	A Wilson	5/12/2009
Manganese	0.71J	µg/L	0.42	1	A Wilson	5/12/2009
Nickel	U	µg/L	0.25	1	A Wilson	5/12/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/12/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/12/2009
Thallium	0.033J	µg/L	0.03	1	A Wilson	5/12/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/12/2009
Zinc	U	µg/L	1.9	5	A Wilson	5/12/2009

Lab-Sample Number: K00002366003
Project Name: TVA-Ash Spill
Sample Description: Field Blank-Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FB
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002366004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1-Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FD
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Iron	380	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Aluminum	530	µg/L	64.0	100	A Wilson	5/12/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/12/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/12/2009
Barium	31	µg/L	2.5	5	A Wilson	5/12/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/12/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/12/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/12/2009
Cobalt	0.37J	µg/L	0.04	1	A Wilson	5/12/2009
Copper	1.0	µg/L	0.38	1	A Wilson	5/12/2009
Lead	0.46J	µg/L	0.10	1	A Wilson	5/12/2009
Manganese	63	µg/L	0.42	1	A Wilson	5/12/2009
Nickel	1.3	µg/L	0.25	1	A Wilson	5/12/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/12/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/12/2009
Thallium	0.040J	µg/L	0.03	1	A Wilson	5/12/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/12/2009
Zinc	3.1J	µg/L	1.9	5	A Wilson	5/12/2009

Lab-Sample Number: K00002366004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1-Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 2FD
Station No.: EMORY002.1RO
Date/Time Collected: 05/12/2009 10:50
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002366005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/12/2009 11:03
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 50 uMHO
Temperature: 17.15
Dissolved Oxygen: 9.52 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	350	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	270	µg/L	64.0	100	A Wilson	5/12/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/12/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/12/2009
Barium	27	µg/L	2.5	5	A Wilson	5/12/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/12/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/12/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/12/2009
Cobalt	0.28J	µg/L	0.04	1	A Wilson	5/12/2009
Copper	2.5	µg/L	0.38	1	A Wilson	5/12/2009
Lead	0.41J	µg/L	0.10	1	A Wilson	5/12/2009
Manganese	39	µg/L	0.42	1	A Wilson	5/12/2009
Nickel	1.1	µg/L	0.25	1	A Wilson	5/12/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/12/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/12/2009
Thallium	U	µg/L	0.03	1	A Wilson	5/12/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/12/2009
Zinc	4.0J	µg/L	1.9	5	A Wilson	5/12/2009

Lab-Sample Number: K00002366005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/12/2009 11:03
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E. McCrary

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 50 uMHO
Temperature: 17.15
Dissolved Oxygen: 9.52 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.05J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002366006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 05/12/2009 11:15
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations

pH: 7.28 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.11
Dissolved Oxygen: 9.39 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	420	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	460	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/22/2009
Barium	33	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.46J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	3.0	µg/L	0.38	1	A Wilson	5/22/2009
Lead	0.78J	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	47	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	1.5	µg/L	0.25	1	A Wilson	5/22/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.052J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	3.9J	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 05/12/2009 11:15
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.28 pH Units
Chlorine, residual:
Conductivity: 52 uMHO
Temperature: 17.11
Dissolved Oxygen: 9.39 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.06J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002366007
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 05/12/2009 11:23
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.13 pH Units
Chlorine, residual:
Conductivity: 51 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.23 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	770	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	870	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	0.86J	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	1.7J	µg/L	0.93	5	A Wilson	5/22/2009
Barium	43	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	0.16J	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.84J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	3.1	µg/L	0.38	1	A Wilson	5/22/2009
Lead	1.3	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	71	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	2.2	µg/L	0.25	1	A Wilson	5/23/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	0.046J	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.18J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	4.6J	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	5.3	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366007
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 05/12/2009 11:23
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.13 pH Units
Chlorine, residual:
Conductivity: 51 uMHO
Temperature: 17.60
Dissolved Oxygen: 9.23 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.07J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002366008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/12/2009 11:34
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.70 pH Units
Chlorine, residual:
Conductivity: 200 uMHO
Temperature: 17.20
Dissolved Oxygen: 9.76 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	600	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	680	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	1.2J	µg/L	0.93	5	A Wilson	5/22/2009
Barium	38	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.52J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	2.9	µg/L	0.38	1	A Wilson	5/22/2009
Lead	0.86J	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	58	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	1.7	µg/L	0.25	1	A Wilson	5/23/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.057J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	3.7J	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/12/2009 11:34
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.70 pH Units
Chlorine, residual:
Conductivity: 200 uMHO
Temperature: 17.20
Dissolved Oxygen: 9.76 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.06J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002366009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/12/2009 11:42
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.43 pH Units
Chlorine, residual:
Conductivity: 62 uMHO
Temperature: 19.18
Dissolved Oxygen: 9.04 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	610	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	1100	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	2.4J	µg/L	0.93	5	A Wilson	5/22/2009
Barium	45	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	0.16J	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.75J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	5.5	µg/L	0.38	1	A Wilson	5/22/2009
Lead	1.4	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	47	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	2.0	µg/L	0.25	1	A Wilson	2/23/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.095J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	4.5J	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	5.7	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number: K00002366009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/12/2009 11:42
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 05/12/2009 14:37
Received By: E McCrary

Field Determinations
pH: 7.43 pH Units
Chlorine, residual:
Conductivity: 62 uMHO
Temperature: 19.18
Dissolved Oxygen: 9.04 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.07J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number:	K00002366010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.86 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	244 uMHO
Project Site No.:	6	Temperature:	15.78
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.19 mg/L
Date/Time Collected:	05/12/2009 11:53	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	05/12/2009 14:37		
Received By:	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/14/2009				S Ufegbu	5/14/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	700	µg/L	2.9	10	A Wilson	5/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	570	µg/L	64.0	100	A Wilson	5/22/2009
Antimony	U	µg/L	0.33	1	A Wilson	5/22/2009
Arsenic	U	µg/L	0.93	5	A Wilson	5/22/2009
Barium	41	µg/L	2.5	5	A Wilson	5/22/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/22/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/22/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/22/2009
Cobalt	0.61J	µg/L	0.04	1	A Wilson	5/22/2009
Copper	2.7	µg/L	0.38	1	A Wilson	5/22/2009
Lead	1.2	µg/L	0.10	1	A Wilson	5/22/2009
Manganese	100	µg/L	0.42	1	A Wilson	5/22/2009
Nickel	1.8	µg/L	0.25	1	A Wilson	5/23/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/22/2009
Silver	U	µg/L	0.03	0.25	A Wilson	5/22/2009
Thallium	0.045J	µg/L	0.03	1	A Wilson	5/22/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/22/2009
Zinc	4.5J	µg/L	1.9	5	A Wilson	5/22/2009

Lab-Sample Number:	K00002366010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.86 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	244 uMHO
Project Site No.:	6	Temperature:	15.78
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.19 mg/L
Date/Time Collected:	05/12/2009 11:53	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	05/12/2009 14:37		
Received By:	E McCrary		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.09J	µg/L	0.029	0.2	A Bass	5/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected